Louisiana Department of Environmental Quality (LDEQ) Office of Environmental Services

STATEMENT OF BASIS

Bunge North America, Inc.
Destrehan Grain Elevator
Destrehan, St. Charles Parish, Louisiana
Agency Interest Number: 103295
Activity Number: PER19990001
Proposed Permit Number: 2520-00048-V0

I. APPLICANT

Company:

Bunge North America, Inc. 12466 River Rd Destrehan, Louisiana 70047

Facility:

Destrehan Grain Elevator 12442 River Rd Destrehan, St. Charles Parish, Louisiana

Latitude 29° 56' 23"; Longitude 90° 20' 56"

II. FACILITY AND CURRENT PERMIT STATUS

The elevator, located on the left bank of the Mississippi River at river mile 120 AHP in Destrehan, consists of a dry bulk storage and transfer operations. Grain [corn, soybeans, wheat, rice, sorghum and oats] and grain products [soybean meal, soybean hulls, soybean hull pellets, corn gluten meal, corn gluten feed pellets, dried distillers grain (DDGs), bakery (cookie) meal] are received (unloaded) by barges and rail cars and transferred to storage. Grain is cleaned and dried, if necessary, to maintain the product integrity in storage. Some commodities may also be screened to remove foreign matter and fines to meet customer specifications, prior to shipping to the customers. The commodities and soybean meal, soybean hulls and soybean hull pellets from the Destrehan Oilseed Processing plant are weighed and loaded into ocean going vessels. Periodically these materials and flaked grains are loaded into and shipped by barge. Collected dust is sent to the processing plant or rail car/truck loader. Off specification commodities are also shipped by rail car/truck.

Destrehan Grain Elevator is a designated Part 70 source. A Part 70 proposed operating permit is being drafted and will be issued to another operating unit within the contiguous single source. This includes:

Permit No.		Unit or Source	Date Issued	
2:	520-00010-V0	Destrehan Oilseed Processing Plant	NA*	

^{*} Proposed permit is being drafted and will (if approved) be issued around the same time this permit is issued.

The facility submitted a timely application for an initial Part 70 permit for another unit, contiguous with this one, which continues to operate under a state permit.

Permit No.	Unit or Source	Date Issued	
2520-00010-V0	Destrehan Oilseed Processing Plant	NA*	

^{*} Proposed permit is being drafted and will (if approved) be issued around the same time this permit is issued.

III. PROPOSED PROJECT/PERMIT INFORMATION

Application

A permit application and Emission Inventory Questionnaire were submitted by Bunge North America, Inc. on May 06, 1999 requesting a Part 70 operating permit. A revised submittal dated September 02, 2003 was received. Additional information dated July 23, 2004 was also received. A second revision dated February 12, 2007 with additional information dated July 11, 2007 was also received. A revised submittal dated January 21, 2008 was received. Additional information dated May 13, 2008 was also received. A final revised application dated June 4, 2008 was also received. Additional information dated June 17, 2008 was also received. Additional information dated July 3, 2008 was also received.

Project

Bunge requests the following actions and changes at its Destrehan Grain Elevator site:

- 1. Obtain an initial Part 70 operating permit,
- 2. Remove Emission Points 1-D, 3-72, 3-72A, 6-72, 20-75, 25-76-1A and 25-76-1B,
- 3. Remove Marine Leg No. 2 and Belt Conveyor 15A Loader, Emission Point 18-72,
- 4. Identify emission sources previously lumped together, re-label those and report separately,
- 5. Create emissions caps for shipping spouts, Barge receiving/unloading fugitives and grain storage bins,
- 6. Update the emissions using the latest approved calculation methods and reflect the potential to emit of the facility and
- 7. Incorporate into this permit all permit actions granted since March 27, 1998, the date Permit No. 2520-00048-01 was issued.

Proposed Permit

Permit 2520-00048-V0 will be the initial Part 70 operating permit for Bunge's Destrehan Grain Elevator facility.

Permitted Air Emissions

Estimated emissions in tons per year are as follows:

Pollutant	Before After		Change	
PM ₁₀	31.50	66.73	+ 35.23*	
SO_2	0.01	0.05	+ 0.04	
NO_X	1.40	. 7.47	+ 6.07	
СО	0.24	6.27	+ 6.03	
VOC	0.19	0.65	+ 0.46	

^{*}This increase, while above the significance level, does not require a PSD analysis and/or permit because this facility is not a PSD major source as explained below.

Contiguous Facilities Summary:

Destrehan Grain Elevator and its adjacent Destrehan Oilseed Processing Plant are contiguous facilities and form a single major source only under the Part 70 regulations. However, these two units do not form a single stationary source under the PSD program because their corresponding SIC codes do not have the same first two digits and are not interdependent as specified in the PSD program.

The permitted and/or estimated emissions from each individual facility, as well as the combined total emissions from both facilities, in tons per year, are as follow:

		Eı	nissions ^l	- TPY		
Facility/Unit	PM_{10}	SO ₂	NO _X	CO	VOCI	TAPs*
Destrehan Grain Elevator (Permit No. 2220-00048-V0)	66.73	0.05	7.47	6.27	0.65	-
Destrehan Oilseed Processing Plant (Permit No. 2520-00010-V0)	63.22	38.25	39.27	56.29	817.01	535.14
Total / Combined Emissions	129.95	38.30	46.74	62.56	817.66	535.14

From the respective application on the basis of which the initial Part 70 permits will be issued.

^{*}Includes 532.71 tons of n-hexane and 2.43 tons of ammonia.

IV REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

Applicability and Exemptions of Selected Subject Items

ID No.	Requirement	Note
DS30-CBU11, GC-I & BC15A LOADER 18-72A	NSPS Subpart DD – Standards of Performance for Grain Elevators for Which Construction, Reconstruction, or Modification Commenced after August 3, 1978 [40 CFR 60.302(b)]	Comply with the standard for particulate matter requirements of 40 CFR 60.302(b).
GRAIN DRYER Nos. 1, 2 and 3	Emission Standards for Sulfur Dioxide Continuous Emissions Monitoring [LAC 33:III.1511.A]	EXEMPT. Units emit less than 250 tons of SO ₂ per year.
17-72, 23-74 and 24-74	Emission Standards for Sulfur Dioxide Recordkeeping and Reporting [LAC 33:III.1503]	DOES NOT APPLY – Unit Emit less than 5 tons of SO ₂ per year.
DS1 and DS1-C SHIPPING GALLERY DUST HOODS & LOADERS 1-72 and 2-72	NSPS Subpart DD – Standards of Performance for Grain Elevators for Which Construction, Reconstruction, or Modification Commenced after August 3, 1978	DOES NOT APPLY. Systems were constructed prior to August 3, 1978.

Prevention of Significant Deterioration/Nonattainment Review

NΑ

Streamlined Equipment Leak Monitoring Program

NA

MACT Requirements

NA

Air Quality Analysis

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Toxic Air Pollutant Ambient Air Quality Standard or (National Ambient Air Quality Standard {NAAQS})
PM ₁₀	24 hour	148.79 μg/m ³	150 μg/m³
n-Hexane	8-hour	3,357 μg/m ³	4,190.00 μg/m³

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

Insignificant Activities

NA

V. PERMIT SHIELD

The facility's request for permit shields is not in accordance with the regulations. As a result, the request for permit shields is not being granted.

VI. PERIODIC MONITORING

Filter vents: Visible emissions monitored by visual inspection/determination daily. If visible emissions are observed, restore operation of the filter to its normal or usual manner of operation as expeditiously as practicable, but at a minimum within three working days, in accordance with good air pollution control practices for minimizing emissions.

VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H_2S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_X) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH_4) , Ethane (C_2H_6) , Carbon Disulfide (CS_2)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀ – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

Prevention of Significant Deterioration (PSD) – A major source preconstruction permit program that has been approved by the administrator and incorporated into the State Implementation Plan to implement the requirements of this Section or the program in 40 CFR 52.21. It is a New Source Review (NSR) permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Any permit issued under such a program is a major NSR permit. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulfur.

Sulfuric Acid (H₂SO₄) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.